

CONTACT

winter 2019



Bittersweet SYMPHONY

THE UQ GRADUATE BRINGING COMFORT
TO SICK CHILDREN THROUGH MUSIC

Living with sharks
FACING OUR FEARS
WITH THE FACTS

NEED FOR SPEED
*Meet the student living
life in the fast lane*

Underbelly exposed
AUTHOR EXPLAINS OUR
LOVE OF TRUE CRIME

Message from the Chancellery



"If universities are to remain valuable institutions in the 21st century... the members of the campus community will need to preserve the college campus as a sanctuary for serious debate of unorthodox ideas and avoid succumbing to the temptation to make them echo chambers of orthodox creeds."

From *Speak Freely: Why Universities Must Defend Free Speech*, by Keith E Whittington.

Freedom of speech on campus has attracted much attention recently. In 2018, the government appointed the former Chief Justice of the High Court of Australia, Robert French, to review the issue. Mr French consulted broadly, including with UQ, and submitted his report in March.

His observation that there was no evidence, based on recent events, to fit the description of a 'free speech crisis' on campus, was welcomed generally across the higher education sector.

Freedom of speech is of course an issue for all of us, not just for universities. Suggestions that Australian universities are shutting down free speech or that we face a free speech crisis at our universities are, in my view, exaggerations. But the concept of free speech, of listening to diverse views, of revisiting the foundations of our shaping ideas and values, go to the core of the role of a university to search for truth.

My own experience of UQ in the mid 1970s was that debate and discussion enriched my education and expanded my world view. They exposed me to a range of perspectives and challenged me to construct and defend arguments. I learnt that dogma is contestable, and that I must interrogate – and at times amend – my beliefs. Although Queensland was governed by a premier famous for repressing dissent, and UQ was home to some of his most trenchant critics, it seemed to me that free speech flourished on our campus.

Today's students may have different concerns and preoccupations to my generation but the value of debate and of listening to views we may not share has not diminished. It remains essential to an open mind, which in turn is the foundation of all knowledge.

Freedom of speech is rightly cherished but it has never been absolute. It is framed and constrained by the requirements of the law and also by university policies, codes and agreements. For instance, under UQ's enterprise agreement, staff have rights to "express unpopular or controversial views, although this does not mean the right to harass, vilify or intimidate other persons or groups or to demean alternative points of view". And the Student Charter asks that students "treat other members of the University community with respect and courtesy".

These are the common-sense ground rules of civil discourse. But they too have their limits. Our duty of care to staff or students does not, for example, extend to protecting them from ideas that they might find uncomfortable or even confronting.

I am personally disturbed by trends such as "trigger warnings", which have been adopted by some American universities. Universities should never ban ideas, even bad ideas. The best way to deal with bad ideas is with good arguments. How else can we nurture intellectual resilience in our students?

Peter Varghese AO
Chancellor



COVER IMAGE

UQ graduate and paediatric palliative care music therapist Maggie James. Maggie uses music to comfort terminally ill children at the Queensland Children's Hospital, and is also a member of the International Board of Trustees for the Butterfly Children's Hospice in Changsha, China.

Image: Anjanette Webb

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THE BIG QUESTION

Should the government regulate social media sites as a means to prevent fake news and misinformation?

Professor Peter Greste

**School of Communication and Arts
Faculty of Humanities and
Social Sciences**

"At a time when everyone is acutely aware of the impact of 'fake news' on public discourse, the idea of regulation seems appealing, but is the wrong approach. 'Fake news' is a deceptively simple term for a horribly complex phenomenon. Those who are behind 'fake news' will almost inevitably find ways around the rules. At the same time, imposing regulations opens the door for government censorship and the control of free speech. It would be far better to find ways of helping social media sites verify information, and of strengthening the media, so that the public has trusted sources it can rely on."

Professor Graeme Orr

**UQ Law School
Faculty of Business, Economics
and Law**

"Regulate social media? That's censorship! What about freedom of the press and all that? Except it wouldn't be. We have had trade practices laws against misleading business speech and promotions since the 1970s. There is no government 'censor'. Instead there are private complaints, with an independent watchdog and courts. So why not sociopolitical speech? The problem with the internet isn't that it's a fast-moving cesspit. TV and radio can be too, but they have minimum standards on bias and lies. Big social media sites are like talkback radio. As they replace older media, they can't expect a world without standards. But the problem with the internet – especially social media – is that it is all of us, often at our worst. The law is always for others, not us."

Professor Katharine Gelber

**School of Political Science and
International Studies
Faculty of Humanities and
Social Sciences**

"Social media is flooded with fake news, misinformation and untruths. A suggestion of government regulation to prevent this might sound tempting. But there is a massive problem: how would this be done? Currently, social media sites like Facebook and Twitter do some of their own moderation, but they do it very badly with accusations of poorly drafted policies and under-trained workers. Due to the importance of free speech, government cannot regulate everything on social media – to do so would create grossly disproportionate screening and oversight of everyone's communications. The best remedy is for the government to enact narrowly targeted regulations combined with leadership in valuing and rewarding truth and evidence-based reasoning."



To have your say, visit contact-magazine.uq.edu.au or download the *Contact* app.



DEVELOPMENT STUDY GOES THE DISTANCE

A 41-year UQ study that has followed people with Down syndrome from infancy to adulthood has helped change perceptions and led to the development of programs that are improving the lives of people with intellectual disabilities around the world.

By Stacey King

In 1978, UQ researchers recruited a Brisbane-born group of babies with Down syndrome for a world-first study that would follow their growth and development from infancy to adulthood.

The study coincided with the end of the practice that saw these children routinely institutionalised, and set out to follow the first generation of people with Down syndrome to be cared for by their families, educated at school, and eventually living in the adult community. Now in its 41st year, the Down Syndrome Research Program,

based at UQ's School of Education, has gone on to become the longest running and most complete study of its kind in the world, contributing to the world's understanding and support of people with Down syndrome and other intellectual disabilities.

Up to 41 children born between May 1976 and December 1978 were initially recruited for the study, and more than 200 families have since contributed to the research program, which has expanded to include many other studies on Down syndrome.

Almost all of the initial cohort of children continue to participate in the study today, providing unique insights

Research impact

into the wellbeing and development of people with Down syndrome and the relationship with their families.

Program Director Dr Rhonda Faragher said the research had debunked many myths about people with Down syndrome.

"This research has affirmed that people born with Down syndrome can look forward to a good life with the opportunity to make valued contributions to their families and the community," Dr Faragher said.

One of the research program's early focus areas was the ongoing development of language for people with Down syndrome.

The research shows that language and literacy skills of people with Down syndrome continues to develop and does not 'plateau' in early adolescence, as was previously thought.

This led to the development of the award-winning Latch-On program, a two-year literacy and technology teaching and learning program for adolescents with Down syndrome and other intellectual disabilities.

Thanks to UQ's commercialisation company UniQuest, Latch-On has been delivered in Australia for more than 15 years. The program has also been licensed to organisations in Canada and Ireland. Current projects are studying teaching approaches for students with Down syndrome in mainstream secondary mathematics classrooms.

Dr Faragher says the generosity of donors has been critical to the program's success. To support the Down Syndrome Research Program, visit giving.uq.edu.au.

RESEARCH IMPACT: highlighting some of the groundbreaking research being produced at UQ.

Life-saving energy

Can UQ scientists find solutions to energy challenges in developing regions and save lives in the process?



Turning tables on maths problems

Find out how UQ can make mathematics more exciting and rewarding for your children.



Aiming to end endo

How close are UQ researchers to ending the battle against endometriosis?



Learn more about UQ's research impact online at research.uq.edu.au.

Strings of an ANGEL

UQ graduate Maggie James believes in the power of music and is using her talent to brighten people's lives – even in their darkest hours.

By Michael Jones

Children's faces light up when Maggie James walks into a room.

With a guitar slung over one shoulder, she lugs a basket full of colourful instruments and wears a smile brighter than her floral-print dress. But she's even happier to see their faces. It's why she got into the business in the first place.

And with a strum of her guitar and her soothing voice, Maggie has the children in the palm of her hand.

As they sing and clap along, they can be anything they want to be – musicians, astronauts, superheroes, fairies and princesses.

They can escape the reality of their hospital beds. Even for just a moment.

Maggie isn't a children's entertainer. She doesn't perform in theatres, on television or at special events. She is a music therapist and her stage is the palliative care wards of the Queensland Children's Hospital in Brisbane, where terminally ill children are cared for during their final days.

Despite the often sad circumstances of her workplace, Maggie (Graduate Diploma in Music

Therapy '02, Master of Business Administration '14) said she was drawn towards palliative care soon after beginning her healthcare career.

"I am on a mission to find and create every little spark of joy so children can live their lives to the fullest while they can," she told *Contact*.

"I strongly believe that we can do better to provide children and families with comfort, respect and love at the end stage of life.

"Palliative care is the only area in which we are no longer able to save a patient's life, so it's critical to find ways to maximise the quality of time they have left – especially for our fragile little patients."

Maggie completed a Graduate Diploma in Music Therapy at UQ in 2002 and began working as a music therapist at the Royal Children's Hospital in Brisbane the following year. Her role was to work with children who had an acquired brain injury, using music to engage them and their families during their rehabilitation.

Maggie looks back fondly on those days and beams as she recalls one of her favourite moments – when a six-year-old patient, who had a severe

head injury from a car accident, woke mid-song after months of being in a coma.

"Her favourite song was *Over the Rainbow*, and I sang it to her every week while she was unconscious," Maggie said.

"One day while I was singing to her, I saw her fingers wriggle and her mouth started to move. So I sang the chorus over and over again.

"I saw that she started mouthing some of the words to the song, so I slowed down and, the next minute, she sang the last word of the chorus.

"It was amazing! Her family shouted with joy and that was the beginning of the little girl's recovery. She is now in high school and loves singing in her school choir."

Listening to Maggie talk, it seems like she was born for this job. But it's a far cry from the concert pianist she spent countless hours practising to be as a child.

"I started playing the piano when I was only two years old – basically before I could talk," Maggie said.

"My musical training background is classical and I was bathed in Mozart, Debussy, Beethoven and Bach from a very young age. ▶

"I love classical music more than anything in the world, but I also love the old Chinese pop songs from the 1940s and '50s that my parents used to play in the car and at home. They bring back happy and warm memories.

"I completed a Bachelor of Music degree at the Queensland Conservatorium in 2000, but I missed being around people and didn't want to spend six hours a day in a practice room by myself.

"I wanted more than a musical connection with my audience, so I explored what I could do that would allow for a combination of people and music."

Maggie said it was important not to underestimate the effect music can have on health and wellbeing, with music linked to increased levels of endorphins and decreased levels of stress.

"Singing helps children strengthen their vocal control and breathing system, while playing instruments improves their fine-motor and coordination skills. Dancing and movement re-train their gross motor skills," she said.

But Maggie said there was more to being a music therapist than just singing and playing.

"It's about understanding patients' medical conditions, their family and social backgrounds, how the body and brain responds to music, and which music-therapy technique will achieve the best outcomes.

"My day is also filled with business-management tasks. Being in a senior role is more than providing the best frontline clinical care: it is crucial to find ways to create a sustainable music therapy service within a complex and rapidly changing healthcare system."

It was for this reason that Maggie decided to pursue a Master of Business Administration (MBA) degree at UQ, from which she graduated in 2014.

Working in the healthcare industry for more than 10 years had honed her clinical skills; however, she realised that she needed to gain other skills to further her career.

"I am on a mission to find and create every little spark of joy so children can live their lives to the fullest while they can."

"I chose UQ because of its global MBA reputation, but its teaching staff, flexible course arrangements and overseas partnerships also won me over," Maggie said.

"I wanted to connect with like-minded people as well as leaders in other fields."

Maggie is using the skills learnt through her MBA in a separate role as a member of the International Board of Trustees for the Butterfly Children's Hospices in China, where she is supporting the Chinese government to establish its own paediatric palliative care services.

Maggie has been involved with the organisation since 2010, when she spent several months volunteering in its hospice in Changsha and also in a local orphanage.

"I believe every child, regardless of illness and family circumstances, deserves to die with dignity and love," said Maggie, who grew up in Hong Kong.

"But, sadly, there is no paediatric palliative care service for children and their families in China. When doctors say to parents that they can't do anything more for their dying child, parents would often have to take their child home and watch them suffer, or abandon them to a local orphanage.

"Compare this to what we have in Australia, which is a very supportive palliative care service. In Queensland, we have a dedicated statewide service that works across the public and private systems.

"It provides symptoms-management care, equipment to support home care, counselling and bereavement services, and a range

of allied health services that include music therapy."

Maggie travels to China regularly and returned to Changsha in February this year, where she met with all Butterfly Children's Hospices board trustees from around the world to discuss a strategic plan for the next three years. She believes that for China to develop paediatric palliative care services, attitudes need to change.

"It's a huge challenge and one that will involve developing resources, educating and training local health professionals, and most importantly, changing cultural perspectives of palliative care," she said.

"In China, having someone die in your house brings bad luck and shame on the family. Most people

can't afford to pay for their children to go into hospital and even if they could, the doctors don't know how to best manage a child's death.

"Many parents abandon critically ill children despite the fact that they could be put in jail if they get caught, so they tend to leave them in places they can't easily be found. The children don't stand much of a chance."

Maggie will focus much of her attention towards the Butterfly Children's Hospice in 2019 while spending more time with her husband Nigel James (Bachelor of Engineering '03, Master of Business Administration '15) – who she met at UQ while completing her MBA – and two children, one-year-old Millicent and Vivienne, born in May.

A strong family support network is important to Maggie, especially due to the emotionally taxing nature of her work.

"It's never easy to say goodbye to my patients, and it's especially hard watching parents, siblings and grandparents say their forever goodbyes," Maggie said.

"Fortunately, I have good supervision and have self-care in place that allows me to reflect on the work I do and look after myself.

"I believe that it's crucial to look after my mental health so I can keep doing the work that I love. I have an amazing and supportive family, which I think is a key protective factor.

"Often after a patient passes away, especially when I'm involved in that

patient's passing process, I take time to have a cuppa and reminisce on the positive things that I got to share with them."

Yet, Maggie is quick to point out the countless magical and joyous moments as well.

"I love walking into the Paediatric Intensive Care Unit with my guitar every day. I think the guitar represents something calm and positive," she said.

"The moment I strum the first chord on the guitar, I see the smiles and comfort on their little faces and that makes my heart sing."

Music therapist Maggie James plays to a five-year-old patient at the Royal Children's Hospital in 2008.

Image: Royal Children's Hospital Foundation.



Our darkest thoughts

EXPOSED

The sinister misdeeds of Queensland's most notorious criminals occupy most of author Matthew Condon's working life. The UQ graduate shared his thoughts on true crime and the power of storytelling with *Contact*.

By Alysha Hilevuo

T rue crime author Matthew Condon has a theory: we're all one twist of fate away from committing murder.

"We start out the same, so why do some people go down that dark path?" Condon said.

"I'm fascinated by how one moment – a fraction of a second – can put you on a different trajectory."

In fact, the award-winning author, journalist and UQ graduate (Bachelor of Arts '82) believes all of humankind shares this fixation – and that it has contributed to the rise in popularity of the true crime genre.

"We're endlessly fascinated by murder because to most of us, it's incomprehensible," he said.

"But who hasn't asked themselves: in what context might I commit murder? Would I do it to protect my children?"

"There's something in us that we don't necessarily want to recognise. Voyeuristically, we can experience it through the stories of others."

Condon is the author of the best-selling *Three Crooked Kings* trilogy, chronicling the rise and fall of disgraced former Queensland police commissioner Terry Lewis, and the corruption that plagued the state's police force and government for decades.

His latest release, *The Night Dragon* (published by UQP and released in March this year), follows the life and crimes of Vincent O'Dempsey.

Queensland's 'Angel of Death' was sentenced to life in prison in 2017 for the brutal murders of Barbara McCulkin and her two young daughters more than 40 years earlier.

"I was the same age as the youngest daughter, Leanne, when the McCulkins disappeared in 1974," Condon said.

"Their childhood was my childhood, and I couldn't comprehend how the case had never been solved."

"When O'Dempsey was finally arrested in 2014, it was a game-changer. He spent a lifetime being a shadow, so when he was standing in the dock of the court with handcuffs on, I thought, 'he's a real person'. That's when I began trying to get a picture of his life."

But Condon's writing career wasn't always immersed in the murky stories of Queensland's underbelly.

Armed with a manual typewriter, he began writing novella-style poems and vignettes. He published his first short story in *Semper Floreat*, UQ's student magazine.

"I remember living at St Leo's College, pedalling up to the bookshop on my bike to get that edition of *Semper* hot off the press."

After graduation, he embarked on a career in journalism while he worked towards his dream of becoming a best-selling fiction writer.

He cut his teeth at the *Gold Coast Bulletin* and went on to work for newspapers including *The Courier-Mail*, *The Daily Telegraph*, *The Sunday Age*, and *The Sun-Herald*.

On the side, Condon diligently plugged away at what would become his first novel, *The Motorcycle Cafe*, which he published at age 26.

Over the years, he has published 10 acclaimed works of fiction and six non-fiction books, and received several prestigious fellowships and awards – including a Medal of the Order of Australia – all while continuing to work as a journalist.

Until 2013, one genre remained virtually unexplored: true crime. That all changed after his fateful interview with Lewis, the eventual subject of *Three Crooked Kings*.

Six years later, Condon said one of the most rewarding parts of the work was engaging with people who had their own stories about the subjects of his books.

"All of my true crime books are interconnected, part of a mosaic, and thousands of people out there have experienced a little bit of this story," he said.

"I've had people contact me and say, 'I was there that day and this is what I saw; I've never spoken before'. It's almost like the entire Queensland community has gotten behind me to fill in the gaps of this picture."

As for what's next, Condon has a few ideas brewing, including a potential book on 10 of the most significant unsolved murders connected to the Vincent O'Dempsey saga.

"I've got enough stories to fill the rest of my life, easily. It's exciting to think about."



The Night Dragon is the first book detailing the astonishing rise and fall of convicted killer Vincent O'Dempsey. Award-winning investigative journalist Matthew Condon has interviewed dozens of ex-cons, police and witnesses to put together a compelling picture of the calculating killer who spent his life evading the law before he was finally brought to justice.

Coming soon from UQP

Something to Believe In
By Andrew Stafford

A memoir of music, madness and love from the author of the cult classic *Pig City*.

The Trespassers
By Meg Mundell

A thought-provoking mystery set on an ill-fated migrant ship heading to Australia in a disturbing near future.

Sick Bay
By Nova Weetman

A brave and uplifting story about friendship and acceptance.

The White Girl
By Tony Birch

A searing new novel that explores the lengths we will go to in order to save the people we love.

For more information, visit uqp.uq.edu.au.



To hear about Condon's top five Brisbane crime stories, watch the video at contact-magazine.uq.edu.au or download the *Contact* app.



Image: © Getty Images/Wildanimal

FEAR

versus reality

The media appears to be reporting more and more shark encounters across Australia each year. But are shark bites increasing? Are there more sharks in our waters than ever before? Shark researcher and UQ graduate Dr Blake Chapman dives in to explain what's happening beneath the ocean's surface.

Sharks remain a hugely polarising and highly debated topic. The efforts we take (or don't take) to mitigate the risk of shark bites continue to be argued among the public, policymakers, conservation groups, recreational water users, and even the scientific community.

Shark bite incidence is undeniably increasing. However, there was a highly noticeable dip in statistics in 2018, with just 66 confirmed unprovoked bites across the globe.

When analysing and assessing shark bite statistics, we generally don't pay attention to annual fluctuations, instead looking more at decadal averages. However, the drop last year was so significant that it was more representative of average statistics from the early 2000s. Although, even this comparison is complicated by the continual growth in communication efforts, human recreational water use, technological advances and the documentation of bites.

There are a number of theories proposed for the drop in 2018, including reduced shark numbers and humans being more proactive in mitigating the risk.

But, as with all things related to shark bites, there are no definitive answers.

Despite the drop in global bite incidence in 2018, the total of 20 bites (including one fatality) that occurred in Australia last year was close to the country's record of 22 bites in one year (which occurred in 2015).

In conjunction with the higher than average number of bites in Australia last year, we also saw some unusual bite patterns, such as the two bites at Cid Harbour in the Whitsundays within 24 hours, and then a third, fatal bite seven weeks later.

Shark bites are random events, and unfortunately not often explainable. However, by retrospectively studying bite patterns from around the world over the past few decades, we have been able to identify some factors that may lead to a greater likelihood of human-shark interaction.

These factors include anomalous climatic events (such as El Niño weather patterns), habitat modification or destruction and, of course, changes to the way humans utilise environments that overlap with sharks. ►



Shark researcher and UQ graduate Dr Blake Chapman.

ABOUT THE AUTHOR

Dr Blake Chapman completed her PhD at UQ’s School of Biomedical Sciences in 2009. She is a science communicator and shark researcher. She published her first book, *Shark Attacks: Myths, Misunderstandings and Human Fear*, in 2017. She develops and presents a range of educational and informational programs on sharks for kids and the general public. Chapman collaborates with a variety of international shark risk management and shark conservation organisations. She is also the Sharks Editor-at-Large for *Australian Geographic*.

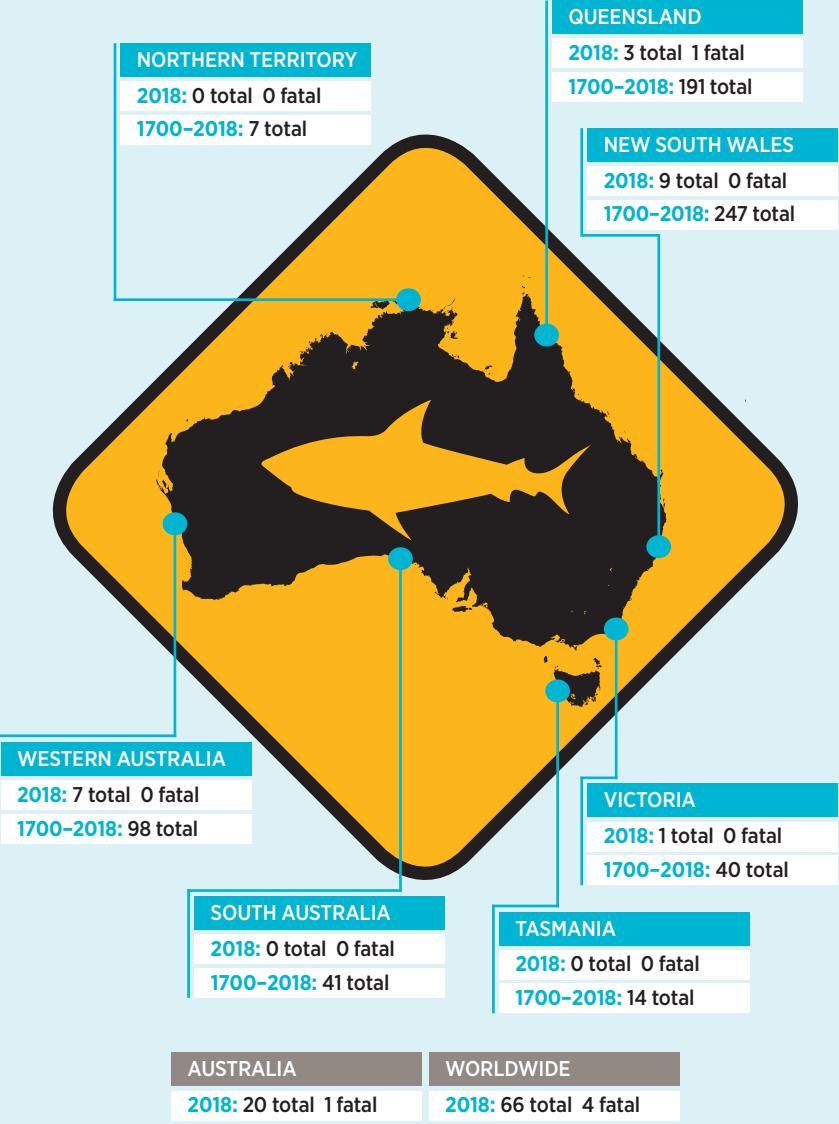
In conjunction with the steady, if not increasing, bite incidence in Australia, the media continues to fuel the fire around shark bites. Anything to do with human-shark interaction is major news. This includes actual bites, sightings (which are still often described with intent-laden terms, suggesting it was lucky that something traumatic did not occur) and governmental shark bite mitigation measures. Less prevalent are the stories that relate to the ‘positives’ of sharks, although, happily, interest in these stories is starting to increase. The

media regularly reports anecdotal claims of ‘bigger and fatter’ sharks and shark populations that are ‘out of control’ or ‘in plague proportion’. Comments on localised sighting increases often come from long-term water users who spend large amounts of time in, on or around the water. Although not validated through any formal processes, these comments (minus any sensationalism and emotion) should not be quickly dismissed. This sort of information is not only important for devising and communicating warnings around present potential risk, but it may also be relevant to better understanding current and evolving shark movement patterns. Knowledge on movement patterns is so important and can greatly assist with developing, directing and optimising mitigation efforts. Although we are seeing more bites and talking about sharks more, we still don’t really know how healthy many of our shark populations are. If we listen to the media, sharks are everywhere! But we are also now looking for sharks and talking about shark sightings like never before. So, really, it is not surprising that we are seeing, but mostly talking about, sharks more often. This creates a perception that shark populations are increasing.

Australia is home to about 180 of the approximate 530 species of sharks that we have on the planet. Evidence indicates that, on the whole, and especially in a global context, we are doing quite well with managing most of these species. There have been some bumps in the road, but we have largely identified which species are at risk, and have taken actions to better protect them. However, not all Australian shark populations have been so lucky. And for these species, reversing the concerning conservation status will be a difficult battle. While not a direct population count, a recently published UQ-led study found that the numbers of (certain species of) hammerhead, tiger, white and whaler sharks caught in the Queensland Shark Control Program drastically declined by 74–92 per cent over the 55 years that the program has been in operation. Equally as worrying, the average size (total length) of the species investigated also decreased significantly, and the probability of capturing adult animals is down. There are compounding factors to studies that use fishing and shark-control programs as a proxy for population assessments, but the findings

presented are so strong that the trends should not be ignored. The task of counting sharks is fraught with difficulty, but a recent CSIRO-led study documented a new, cutting-edge methodology that, for the first time, provided a really compelling population assessment for large, highly migratory sharks. The study assessed the eastern and south-western Australian white shark populations (which rarely cross over) and estimated that there are likely to be around 750 and 1460 adult sharks in these populations, respectively. There is great optimism that the technique can be rolled out to develop baseline population counts for other species as well, and provide a foundation for assessing population trends of these sharks in the future. Major pressures on shark populations include legal and illegal fishing, habitat degradation, marine debris and shark control programs. Despite all of the talk and sensationalism, shark bites remain extremely rare and unlikely events. Yet, Australia employs a wide range of lethal and non-lethal mitigation measures. We know for sure that none of the currently developed regional mitigation measures are 100 per cent effective and, in fact, it is far more likely that most are equivocal at best when it comes to reducing bites on humans. Yet, lethal measures, in particular, can be hugely destructive to the environment and have resulted in significant marine animal mortality. While governments should be leading and developing policy based on thoroughly considered scientific information, they are often instead heavily influenced by voter emotion and fear. Unfortunately, fear is tricky to govern; it is a subconscious emotion and largely inconsiderate of consciously known facts. Humans aren’t inherently afraid of sharks, but the ancestral fear of predators is processed in one of the most basal parts of our brain. As such, this fear is very easily acquired, and very difficult to break. Studies have shown, though, that we can help to ‘immunise’, or condition, ourselves against fear through early positive, or even neutral experiences with the stimulus. My recent efforts have taken this concept on board, and I have developed

SHARK BITES: UNPROVOKED



Source: Australian Shark Attack File and International Shark Attack File

an educational program on sharks for kids. My hope is that by providing kids with a fun introduction to sharks early on, along with encouragement for continued learning and discussion, that this experience may buffer negative stories they will undoubtedly be exposed to later in life. The program presents some of the unique and fascinating aspects of sharks, but also works to reduce common sensationalised concepts, bringing the image of ‘sharks’ back to reality. The kids participate in hands-on activities that demonstrate the importance of sharks in the environment. And of course, some safe swimming tips are thrown in,

as this is still the much greater risk accompanying any sort of water activity. Overall, my aim is to help to develop a stronger, more informed and more compassionate future generation capable of making the difficult decisions that surround conservation and environmental management.

**Listen to the podcast**

uq.edu.au/changemakers/podcast
or subscribe to the series on iTunes

Following the HERD

No less than 24 members of the extended Harpham family have graduated from UQ. But one particular program stands out, thanks to its position at the heart of the family business – UQ's Bachelor of Veterinary Science.

Image: Anjanette Webb

By Alysha Hilevuo

The year was 1980. Malcolm Fraser was five years into his term as Prime Minister, Australia's first test-tube baby was born, and 16-year-old Sandra Jephcott (Bachelor of Veterinary Science '86) was about to graduate from high school.

When it came time for Sandra to choose her university degree, it was only natural that she gravitated towards UQ's Bachelor of Veterinary Science – following in the footsteps of five members of her extended family.

Their shared legacy began in 1939, when Sandra's uncle Neville Harpham first enrolled in the program. Back then, UQ's fledgling School of Veterinary Science was housed inside a converted stable in Yeerongpilly, with a first-year intake of fewer than 10 students.

Tragically, Neville was killed during World War II in Finschhafen, Papua New Guinea, in 1943. He never had the opportunity to finish his degree.

Sandra's mother and beef industry pioneer Barbara Jephcott (Bachelor of Veterinary Science '55, Bachelor of Economics '66) was next to take up the mantle for the family in 1950.

As the lone woman in her graduating class of 10, Barbara was also the second ever female veterinarian in Queensland. Compare this to 2019, with its majority-female Bachelor of Veterinary Science cohort, and even to 1986, when Sandra graduated in a cohort of 33 women and 28 men.

Although Barbara's path bucked traditional norms, Sandra said her mother wasn't trying to prove a point.

"Mum didn't dwell on her gender," Sandra said.

"In her era, if someone made a derogatory comment, she came right back at them and moved on. But she got on well with her male classmates."

At the time, students commuted between Yeerongpilly, Brisbane's CBD, and UQ's training facility at Pinjarra Hills Farm. Barbara often herded her classmates to practical lessons and field trips to Boggabilla and the Glasshouse Mountains in the back of her ute.

In the 1950s, the School's teaching centred on agriculture and production animals, and Barbara was required to learn how to shear a sheep – an



... The Harpham family vets, from left, David Harpham, Sandra Jephcott, Barbara Jephcott, Phillip Harpham and Andrew Norris (above); and current UQ veterinary science student Shanice Nitis working with cattle at the Darbalara cattle handling facility near UQ's Gatton campus.

aspect of the curriculum that had disappeared by the 1980s, when the focus shifted to cattle.

By the time Sandra's cousins, Phillip Harpham (Bachelor of Veterinary Science '70), David Harpham (Bachelor of Veterinary Science '75), and Andrew Norris (Bachelor of Veterinary Science '78) had enrolled in the program, the School had migrated to the St Lucia campus.

Sandra's UQ journey began in 1982. She trained in small animal, horse, sheep and cattle practical work and surgery, was an active participant on the School's social scene, and relished her hands-on clinical experience with practising vets in her final year.

After graduation, Sandra embarked on a thriving career as a beef cattle veterinarian. Her work took her to Papua New Guinea, Russia and around Australia, particularly northern Australia. Today, she owns and operates a cattle property near Surat in Queensland and works as a consultant beef cattle veterinarian for another UQ veterinary science graduate.

Sandra currently trains and houses UQ students undertaking clinical placements, doing her part to educate the next generation of veterinarians.

In 2010, 24 years after Sandra graduated, the School of Veterinary Science moved to its current home at UQ's Gatton campus.

Its state-of-the-art facilities include diagnostic, research and teaching laboratories, a Clinical Studies Centre where students learn animal handling and surgery, a Small Animal Hospital, an Equine Specialist Hospital, and the Dayboro veterinary surgery.

Like Sandra, Head of School Professor Nigel Perkins has been associated with the School since his undergraduate degree in the 1980s and has seen many transformations.

"Major changes include the development of world-class facilities and equipment for teaching and veterinary clinical service, and more online-based teaching," Professor Perkins said.

Now more than ever, there is an emphasis on practical, real-life experience, including boot camps, clinical training and courses to develop emotional intelligence, resilience and client-management skills.

On the research front, the School has made significant contributions to development and innovation in veterinary science, ranging from using dogs and other animals as models for human disease research, to improving productivity and profitability in northern beef cattle herds.

Despite the metamorphosis, Professor Perkins said the passion and dedication of the School's teaching staff, and their commitment to providing the best learning experiences for students, remained the same.

Sandra agrees.

"We were always interacting with each other and with our teachers, we learnt how to deal with people.

"That's 80 per cent of what you do as a vet – talking your clients through the best outcome for their animals."

 To see more images of the Harpham family, visit contact-magazine.uq.edu.au or download the *Contact* app.

THE FAST AND THE STUDIOUS

UQ student Harri Jones is quickly establishing himself as one of Queensland's up-and-coming motorsport stars, while achieving outstanding results on his way to an engineering degree.

By Michael Jones

Harri Jones doesn't seem to notice the snarling engine bursts or the deafening rap of the impact wrench tightening the wheels of his glistening white Porsche 911 GT3.

His mind is processing the final instructions being barked at him through his race helmet.

He does his best to ignore the heat – it's mid-January and the temperature has climbed above 30 degrees inside the car. It will only

get hotter out on the track. He's used to this pre-race routine. At just 19 years old, Jones has already established himself as a force on four wheels after taking out the Australian Formula 3 Championship in 2018.

But today is different. Today is the first time he has test-driven the Porsche after joining the McElrea Racing team as a driver in the 2019 Porsche Michelin GT3 Cup Challenge Australia series.

As he pulls the car out of pit lane and accelerates confidently down the Queensland Raceway track for his first

laps, it's obvious he already feels right at home.

Jones puts the car through its paces – hurtling down the straight in a blur and hurling the 460-horsepower machine into the tight corners. Ten laps later he eases the car back into pit lane to debrief with his team.

As both machine and driver cool down, Jones describes what it's like to be behind the wheel at speeds of up to 250 kilometres per hour.

"There's a lot going through your head just before a race," Jones said.

"It can be quite nerve-racking, but it's important to settle those nerves before you get out on the track.

"Things happen really quickly and you have to be switched on to ensure that you don't crash, and that you're leading the pack into the first corner."

Despite the high speeds and the high stakes, Jones rarely feels scared before a race.

"These cars are built purely for racing," he said while casually perching himself on the Porsche's sleek bonnet.

"When you're strapped in, it doesn't feel like you're travelling that fast. ►



UQ student Harri Jones at Queensland Raceway with the car he tested for McElrea Racing ahead of the 2019 Porsche Michelin GT3 Cup Challenge Australia series.

“Everything seems to slow down and you get into a rhythm. But as soon as you make a mistake or something happens in front of you, that’s when you snap back to reality and realise how fast you’re actually going.”

Jones inherited his need for speed from his father, Peter, a veteran of the Queensland motorsport industry.

“Dad’s raced a variety of cars during his career, and he’s owned a few fun cars as well. As a passenger, I remember the adrenaline rush every time he put his foot down on the accelerator and I’ve been chasing that feeling ever since.”

But Jones didn’t follow the typical path into motorsport like many of his competitors.

While other drivers his age were honing their skills in junior go-kart championships, Jones spent his childhood bumping and weaving his way across the country on the downhill mountain bike circuit.

“Mountain biking is very different to racing cars, but there are some similar fundamental aspects,” Jones said.

“Moving into motorsport at 15 – against kids who are usually hopping out of go-karts – had its drawbacks, but I’ve been able to claw my way back to their level.”

“I remember the adrenaline rush... and I’ve been chasing that feeling ever since.”

Jones began his four-wheel career in 2015 in the Queensland Formula Ford Championship, finishing second in the overall series before stepping up to the Australian Formula Ford Championship for the next two years.

He stepped up another class to the Australian Formula 3 Championship in

2018, winning the title at just 18 years of age.

He has raced on some of the world’s most prestigious tracks, including Yas Marina Circuit in Abu Dhabi and Mount Panorama in Bathurst, New South Wales, and was part of the winning PROsport Performance team in the 2017 Bathurst 12-Hour Class C race.

“There is no other track in the world like Mount Panorama,” Jones said.

“The walls are so close on the mountain and it definitely emphasises how fast you’re going.

“I was on the track with Australia Supercars champions like Craig Lowndes and Shane van Gisbergen, which was an experience I will never forget.”

While Jones is determined to follow in the slipstream of his idols, such as Lowndes and Australian Formula 1 superstar Daniel Ricciardo, he is also pursuing a combined engineering and mathematics degree at UQ.

Now in his second year at university, the former King’s College resident has maintained an impressive GPA of 6.85.

“I’ve had a strong interest in mathematics and science from a young age and felt that engineering was the degree that best suited me,” Jones said.

“Motorsport is centred around engineering. The team analyses data and goes through the car set-up after every session.

“My engineering background has benefited my driving. I’m able to understand and analyse the data that’s extracted from the car a lot better than I have previously, and I can provide quick and accurate feedback to the engineers I work with.”

But Jones is quick to point out that motorsport isn’t just about driving – it is also a business.

“I have to work closely with sponsors to secure funding for my racing, and I also work part-time for the team at McElrea Racing,” he said.

“Engineering is an intense degree and juggling my studies with motorsport can be difficult. In 2018, I was awarded elite athlete status by UQ, which was very helpful when exams and assignments clashed with races and events.”

Another commitment for Jones is staying physically fit, and he works closely with personal trainer Tim Just from Fluid Performance.

The training is paying off today at Queensland Raceway near Ipswich, where the temperature has reached 35 degrees.

“Not only is racing physically straining, but the temperature can reach up to 50 degrees inside the car,” Jones said.

“You have to train your body to cope with the physical demands of driving, watch what you eat, and stay hydrated.

“It’s usually your concentration that falters before anything else. And if you lose five to 10 per cent of your body fluid, you’re going to lose concentration pretty quickly.”

Admiring the chassis of the Porsche 911 GT3, Jones admitted it was going to take some time to adjust to the new style of racing, having spent the majority of his short career driving open-wheel cars.

Jones said he was excited to join McElrea Racing for the 2019 series

PORSCHE 911 GT3: THE SPECS

TRANSMISSION

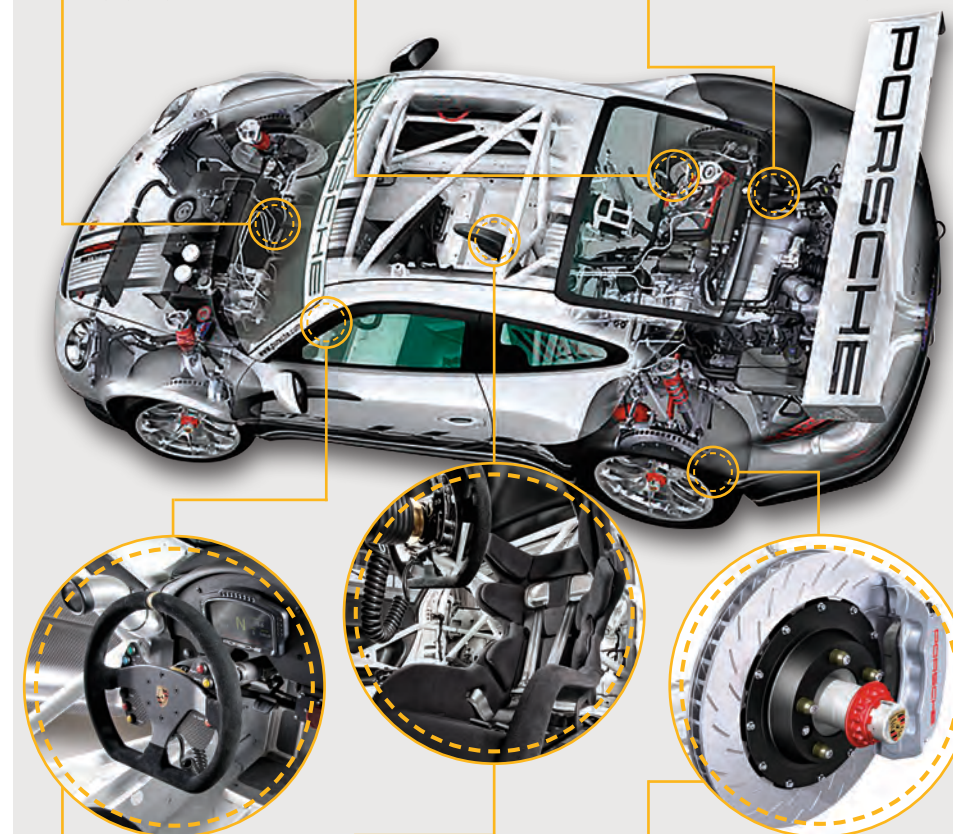
Porsche six-speed sequential dog-type gearbox

POWER

338 kW (460 hp)

ENGINE LAYOUT

Aluminium six-cylinder rear-mounted Boxer engine



STEERING

McPherson strut at front, multilink suspension at rear, non-adjustable racing shock absorbers, anti-roll bar

SAFETY

Welded-in roll cage, FT3 safety fuel tank, fire-extinguishing system

BRAKE SYSTEM

Aluminium six-piston racing calipers in mono-bloc design at front, aluminium four-piston racing calipers in mono-bloc design at rear

Images: Porsche Cars Australia

and to continue learning from the experienced team of engineers, mechanics and drivers.

“I’ve known [team founder and principal] Andy McElrea my whole career – I used to race against his son when I first started out in Formula Ford,” Jones said.

“Over the years we got talking about what I really want from my career and which pathway would be best for me.

“A Formula 1 career was becoming unrealistic for a variety of reasons, including my physical size. So hopping into a touring car, like the Porsche, was the best option.”

As the Porsche’s engine roars back to life, it’s time for Jones to take it for another test run.

After pulling on his helmet he pauses before attaching his neck brace.

“Driving at these speeds is a lot more physically straining than most people think,” he said.

“The g-forces are pretty intense and you definitely feel it after a long stint of driving.

“But I love it.”

web To experience a lap with Harri Jones, watch the video at contact-magazine.uq.edu.au or download the *Contact* app.

Love your GUTS

Dr Megan Rossi (Doctor of Philosophy (Medical Science) '15) is a registered dietitian who shares her science-based nutrition advice to her online following of more than 100,000 readers.

Ahead of the release of her debut book later this year, *Contact's* Rachel Westbury sat down with Rossi for some easy-to-digest information on all things gut health.

What is gut health, and why is it so important?

Gut health relates to the functioning of your entire gastrointestinal (GI) tract – the tube that delivers food from entry to exit. This involves the digestion and absorption of nutrients, 70 per cent of your immune cells, and many other functions that happen without you knowing. It's only been in the past decade that we've discovered the significance of the trillions of bacteria that live within everyone's GI tract. This community of bacteria, known as your gut microbiota, is considered central to our overall health and happiness.

Why did you decide to specialise in gut health?

My interest in the gut began after I lost my grandma to bowel cancer during my undergraduate degree in nutrition and dietetics. Several years later, when I was working as a clinical dietitian, I noticed that my kidney disease patients frequently complained about gut issues. That gave me the push I needed to begin my PhD to explore the role of gut health, diet and chronic diseases – especially kidney disease.

What do you love most about your work?

I love research and helping patients, but I also really enjoy sharing ground-breaking research with the public on social media. I feel incredibly fortunate to be able to work across these three areas. By day, I lead research at King's College London, investigating nutrition-based therapies in gut health. By night, I run The Gut Health Clinic, a team of gut-specialist dietitians dedicated to helping people get the most out of their gut health. In between research and clinical practice, I enjoy sharing some of the exciting research with the general public on social media. To have the opportunity to write a book on a topic that I'm so passionate about and truly believe will improve lives, has certainly been a dream come true. *The gut health doctor: an easy to digest guide to health from the inside out* is set to be published by Penguin Life in September 2019.

How has social media changed the way you communicate about health?

It has given scientists like myself a platform to share information that previously would have been kept within the walls of universities.

You advise that we should aim to eat 30 or more plant-based foods per week. Why 30?

Research has linked this number with greater gut bacteria diversity, which is associated with better overall gut health. Essentially, the more diverse your plant-based foods, the more diverse the range of plant chemicals you're feeding your bacteria, which in turn facilitates the growth of a more diverse range of bacteria – which is thought to be key to overall health and happiness!



7 steps FOR BETTER GUT HEALTH

- 1. Eat a varied diet that's rich in fibre:** High-fibre food includes vegetables, fruit, wholegrains, legumes and pulses. Gradually increase fibre over several weeks to give your gut time to adapt.
- 2. Experiment with fermented foods containing good bacteria, such as kefir, kimchi or sauerkraut:** Foods containing natural live bacteria come at no extra cost and taste great.
- 3. Avoid unnecessary medications, particularly overuse of antibiotics and painkillers:** These can aggravate gut problems and disrupt your gut bacteria.
- 4. Chew your food well:** Digestion starts in the mouth. Aim to chew your food between 10–20 times, until the food is broken down and not so tasty anymore.
- 5. Take time to breathe, destress and sleep well:** There's a link between your brain and gut. Being stressed and tired can affect your gut health.
- 6. Exercise regularly:** Exercise helps to regulate bowel habit, particularly those prone to constipation. It's also associated with greater diversity in gut bacteria.
- 7. Know when to seek medical advice:** Alarming symptoms include unexplained weight loss, low iron levels, rectal bleeding, and changes in bowel habits lasting more than six weeks, particularly in those over 50 years of age.



To read the extended interview with Rossi, visit contact-magazine.uq.edu.au or download the *Contact* app.

Healthy lessons for NEXT generation

UQ Healthy Living promotes healthy ageing for over-50s, yet the multimillion-dollar, state-of-the-art facility is also helping the younger generation by providing student practitioners with valuable industry experience.

By Kirsten O'Leary

After more than 40 years of teaching and training psychology students at UQ, Emeritus Professor Tian Po Oei is grateful to be able to still contribute to student learning by attending regular health and fitness sessions at UQ Healthy Living.

Each week, 73-year-old Oei and his wife Elizabeth attend circuit training and tailored individual sessions using the Toowong-based clinic's state-of-the-art strength and aerobic equipment.

Students from UQ's Faculty of Health and Behavioural Sciences design sessions for clients in consultation with leading healthy ageing practitioners.

"I feel it is my good fortune that by taking care of my health and wellbeing in retirement I can contribute to the learning and training of UQ students," Oei said.

"We are really happy with the facilities and the students are always very helpful and enthusiastic in helping to guide our exercises.

"The classes provide a balance between fixed-circuit exercises and exercises that are tailored to our needs. Our fitness and wellbeing is being maintained, allowing us to carry out our routines of living peacefully."

Oei began his academic career with UQ in 1984, when he moved to Brisbane from the University of Otago in New Zealand to take on the role of Senior Lecturer and Director of the Psychology Clinic in the School of Psychology.

He received a UQ Excellence in Higher Degree by Research Supervision award during his time at UQ and led some of the school's most successful international projects, including the UI-UQ undergraduate twinning program with the University of Indonesia.

Oei was made an Emeritus Professor of UQ after retiring in 2010. His commitment to education was further highlighted recently following a generous donation for a UQ Oei Family Scholarship for postgraduate study in clinical psychology leading to professional practice.

UQ Healthy Living offers many services to clients aged over 50, including psychology, dietetics, exercise and sports science, clinical exercise physiology, nursing, pharmacy, and physiotherapy.

UQ Faculty of Health and Behavioural Sciences Executive Dean Professor Bruce Abernethy (Bachelor of Human Movement Studies (Education) (Honours 1st Class), '80) said the clinic is a unique model as it addresses cognitive, physical, mental and social wellbeing all under one roof, and provided an interprofessional team environment in which students can practise and learn.

"Our students get the opportunity to understand the significance of interprofessional practice and the expertise that each discipline can bring to improve health outcomes," Abernethy said.

"Students work with a range of clients from different backgrounds,



UQ Healthy Living student practitioner
Kristin Murray works with
Emeritus Professor Tian Po Oei.
Image: Anjanette Webb

who have varying health issues. These experiences challenge them to be innovative, utilise their clinical reasoning skills and equip them to be work-ready graduates in a complex healthcare environment."

UQ Healthy Living is managed by UQ Health Care, a not-for-profit company 100 per cent owned by UQ.

UQ Health Care Chief Executive Officer, Darryl Grundy (Bachelor of Pharmacy '87) said clients often shared feedback about their positive interactions with students and the level of support they received.

"The intergenerational aspect is highly valued by both the over-50s and the students. It's an experience for the students that's both enjoyable and educational, while the older generations experience social and emotional benefits from dealing with the younger generation in this setting."

Oei and his wife Elizabeth were among the first clients at UQ Healthy Living when it opened in June 2018.

"We have been attending classes for 11 months and have gotten to know many other people, so we enjoy meeting with them at each class," Oei said.

"It makes every training session an occasion to look forward to."

Grundy said that maintaining social connections was integral to healthy ageing.

"It's great to see clients enjoying their exercise together, learning more about their health, working together to problem solve their health issues, and forming friendships outside of the clinic," he said.

"I love that the clients come here motivated to change their health and make positive changes to their lifestyles. This positive attitude inspires others around them, as well as the student practitioners."

web For more information about UQ Healthy Living services and how to get involved, visit uqhealthyliving.com.au.

Scholarship ends university DROUGHT

Cattle farmer Tim Bonner always hoped to send his son Adam to university. When a decade-long drought drove the family into financial hardship, a UQ Young Achievers scholarship provided Adam with the chance to achieve his dream of going from bush to business.

NOT IF, WHEN.

THE CAMPAIGN TO CREATE CHANGE

By Renae Bourke

It's a vivid memory that will never fade for Adam Bonner (Bachelor of Commerce / Bachelor of Business Management, '18): the emotional phone call he received in 2011 from his father, Tim, during morning tea break at school.

After many years of financial and mental strain for his parents on their cattle farm near Stanthorpe, Queensland, Adam could be forgiven for immediately assuming his life was about to be turned upside down by whatever his father had to so urgently share with him. And turned upside down it was.

"Adam, you've got the Young Achievers scholarship," Tim said through his tears.

"You're going to university."

Sending their eldest child to university had seemed a distant prospect; a hurdle they were unlikely to be able to overcome. The family's farm had been suffering from the same drought that has ruined many families' livelihoods throughout Australia, particularly in the last decade.

The financial toll on the Bonner family had been crippling.

"We were in a really bad way at that time," Tim said.

"I felt like I might have failed my boys.

"Every father wants to be a provider, but it got to the stage where I couldn't do it.

"We couldn't send Adam to university, we couldn't fund it, we couldn't rent a house for him, we couldn't do anything."

Adam was a model student in high school. He played sports at a representative level, and his ambition and work ethic was evident in his high grades and his determination to help on the farm whenever he could.

But his family's rural isolation and lingering financial issues meant chasing his dreams of a university education remained out of reach.

"When the scholarship came through, I just thought, 'it's happening, my boy's going to uni'," Tim said.

"Receiving that scholarship meant that Adam was the first person in our family to ever go to university."

"Receiving that scholarship meant that Adam was the first person in our family to ever go to university."

His father's relief was not lost on Adam.

"In Dad's voice you could really hear how deeply it had affected him," Adam said.

"He and Mum now had the peace-of-mind that I would receive a university education."

With his parents' anxieties alleviated, Adam knew the onus was on him, now more than ever, to continue working towards an overall high school score that would secure his position at UQ.

Adam's first Young Achievers camp in Year 11 provided him with clarity around study options and career pathways. But his keenest memory of the camp was of the program mentors – current UQ students who volunteer their time to counsel participants through their final years of high school and support and motivate them through to university life.

"The mentors were so full of energy, so inspiring," Adam said.

"I walked out of that camp feeling so empowered about my school journey and empowered to get into university."

While he chose to play to his strengths when selecting a course, Adam credits his family's financial history with his decision to study commerce and business management.

"My interests and strengths were in those areas," he said.

"But with the financial struggles that my family had been through, I knew that if I could study and learn those skills, then I could also directly help my own family."

Tim Bonner and his son Adam on the family's cattle farm near Stanthorpe, Queensland.



As a resident of St John's College at the St Lucia campus, Adam participated fully in the student experience at UQ.

In addition to his study, he worked as a student ambassador, was involved in the UQ Idea Hub, undertook an exchange program to China, and closed the loop on his Young Achievers Program (YAP) journey by becoming a program mentor.

"Having been through the program as a student and knowing how much of an impact those mentors have had on my life, I wanted to be able to give back and become a mentor of the program myself," he said.

During his time as a mentor, Adam counselled 10 students from similar backgrounds to his own.

"It was an amazing experience to see them graduate," he said.

"It made me feel like I had made a difference in their lives, just like my mentors had made a difference in mine."

In his final year at UQ, Adam secured an internship with a 'big four' accounting firm, which progressed to a permanent role after his graduation.

Adam is keen to use his education and experience to help young adults who find themselves in a similar situation to his own.

"I would like to create a financial education program for young students," he said.

"When students are coming out of high school they often don't understand things like tax, superannuation, savings, loans and those types of things.

"I would like to implement a financial education program within schools around Australia."

In addition to his goal of providing financial education to students, Adam is using his new-found knowledge to help improve his family's farm.

He has completed a business analysis on their farm and is helping to implement new strategies to improve the financial stability of the business.

"He was never destined for the farm, we knew that, and we knew he had everything he needed, personally

NOT IF,
WHEN.

"It made me feel like I had made a difference in their lives, just like my mentors had made a difference in mine."

– the intelligence and the drive – to go to university," Tim said.

"For him to miss out would have been horrible.

"If it wasn't for the Young Achievers Program... well, it would have been a tragedy for someone with Adam's abilities and talents to have missed the opportunity to have pursued his dreams."

While it's a heartwarming portrayal for a father to share of his son, theirs is not a unique story. There are countless talented and deserving students struggling to overcome their own barriers to education, hoping to pursue their own dreams.

YAP continues to expand each year, but only with growing and continued support from our valued donors.



To help more students like Adam achieve their university goals, visit giving.uq.edu.au.



: Adam Bonner presents a talk to high school students (left); Adam works with his father Tim on the family's cattle property (above).

What is the Young Achievers Program?

The Young Achievers Program (YAP) is one of The University of Queensland's most transformative and long-term scholarship programs, beginning when the recipient is in their senior years of high school and lasting, for most students, through the entirety of their undergraduate studies at UQ.

Students are selected in Grade 10 based on their demonstrated academic potential to succeed at university, as well as their strong sense of motivation despite financial hardship.

In Years 11 and 12, YAP participants attend residential camps held at a

University college on UQ's St Lucia campus. These on-campus experiences are an important means of building students' educational aspirations, establishing mentoring relationships and delivering activities that foster social, academic and personal growth.

During these senior high school years, YAP students receive financial assistance for education costs. They also receive crucial ongoing support and mentoring from current UQ students – often previous YAP participants – which can provide clarity on study options, as well as education and career pathways.

Once they have gained entry to UQ, YAP students receive tailored support services as well as significant financial assistance. These senior YAP participants often also choose to give back to the program by becoming mentors themselves, providing the next generation of YAP students with the support they themselves have received.

Having celebrated its 10th anniversary in 2018, the power of YAP can be seen in an entire generation of truly outstanding graduates – like Adam Bonner – who have benefited from this flagship scholarship program.



Research benefits from country GENEROSITY

Contact spoke to UQ alumnus, business leader and philanthropist Bobbie Brazil AO (Bachelor of Arts '66, Bachelor of Laws '87, Master of Business '98) to hear how ideals forged during her farming childhood informed the focus of her life's work.

By *Melanie Williams*

Bobbie Brazil is no stranger to hard work. Growing up on a dairy farm near the small Queensland town of Jambin, her childhood was characterised by walks to the milking sheds in the twilight hours of the morning.

Her commitment to rising before dawn each day to work taught her the value of earning a position in life.

Now, sitting at the kitchen table of her Darling Downs home, having swapped milking machines for mechanisms of governance and industry, she reflects on her life.

Bobbie pauses, staring out at the sorghum and cotton that stretches from horizon to horizon outside her window, before providing her insights on success.

"You have to stick with whatever you are doing, and find the reasons that others should join you," she said.

"You don't have to trample on people to be successful; you achieve what you want with consistency, diligence, and knowing what is important to you.

"It's a matter of knowing what you want to be in the world, sticking at it and making things happen."

It is the duality of Bobbie's position – her current good fortune earned through grit and sacrifice – that has driven her to contribute to positive social change and enhance Australia's growth.

A former solicitor, she has assisted local, state and federal governments in multiple capacities including as adviser to Deputy Prime Minister John Anderson while serving on the Regional Women's Advisory Council and has held appointments on various boards.

In addition to ruling an empire of large-scale mixed farming businesses with her husband Lyn, and becoming a founding investor in online booking service Wotif, Bobbie was also a leader in higher education for more than 17 years.

She served as Deputy Chancellor of the University of Southern Queensland prior to being appointed Chancellor and serving eight years in this position, one of few women in Australia who have held this office.

Her hard work and financial acuity naturally brought with them a degree of prosperity – yet she and her husband, Lyn, have worked diligently to give away what they have earned.

Through the Brazil Family Foundation, the Brazils have supported initiatives throughout Queensland from potentially lifesaving medical research to women's shelters and scholarships.

Lyn said his family were committed to empowering talented researchers and decision-makers to find solutions for pressing issues.

"It's a matter of looking for unmet needs – we approach organisations we feel need help, we ask them what they need to move forward," he said.

"We then do our best to provide them with funding so they can get on and do their job."

It is this community-focused vision that has driven the foundation's support of medical research projects developed in Queensland, allowing the benefit of these projects to remain in the region. One such example is their support of research at the Queensland Brain Institute (QBI) at UQ.

After recognising one of Australia's biggest killers, stroke, had only slim treatment options and no cure, the Brazils chose to establish a clinical arm at QBI to advance research into stroke and motor neurone disease (MND).

This extraordinary gift, one of the largest received by QBI to date, will help clinicians and researchers work side-by-side with patients on evolving treatment options and cures.

The Brazils also joined the community of donors and government partners who have supported a potential treatment for dementia developed at QBI through its pre-clinical phases.

The potential treatment, which uses ultrasound technology, has restored memory and reversed the symptoms of Alzheimer's disease in animals – it is thanks to the generosity of donors like the Brazils that human safety trials for this new treatment will start in late 2019.



To find out how you can support a cause that motivates you, visit giving.uq.edu.au.



The hidden GEMS of Madagascar

The most precious gems are easy to find if you know where to look. They're in the rivers, near the surface of mines or on the side of the road. They are the women sapphire miners of Madagascar. Yet, despite their sparkling nature and colourful exterior, they are the forgotten treasures of a multimillion-dollar industry.

The island nation of Madagascar is one of the world's biggest sapphire suppliers, with almost US\$250 million worth of gold and stones exported to other countries in 2011 alone. Despite this, 92 per cent of Madagascans live in poverty, and female sapphire miners are among the nation's most poverty-stricken.

Lynda Lawson, a PhD student from UQ's Sustainable Minerals Institute, is working to provide a brighter future for Madagascar's women miners by developing training and resources to improve their independence and financial autonomy.

"The most striking feature of the sapphire business in Madagascar is the absence of support for local people, particularly women, who seek to make a living in this trade," she said.

"The story of mining is so often seen as a male frontier, but there are many women involved in mining and no one has told their story."

Lawson has spent the past four years working with the women to document and analyse their lives, focusing on the pathways, opportunities and challenges in the sapphire industry.

"I found that these women were among the poorest in Madagascar, with very low rates of education and few opportunities," Lawson said.

"Thousands of women are involved in work with sapphires and other gemstones in Madagascar, but they have very few opportunities to participate in the gemstone trade beyond sieving tailings in the river,

surface mining and selling small stones, where they are referred to as 'the ladies in hats'."

Her work has attracted the attention of German development agency Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), which asked her to complete a baseline study on women working in the south-west sapphire fields.

"GIZ asked me to do a baseline study, which involved collecting data from local authorities and interviewing the women in the south-west sapphire fields in groups and individually," Lawson said.

Lawson saw an opportunity for the women to add value to the stones they found, and created a basic field gemmology course with UQ geology graduate and gemmologist Charles Lawson (Bachelor of Science '06).

"The first step in adding value is knowing about the gems you're selling. Each woman is supplied with a basic gemmology kit – a loupe (a small magnifier), tweezers, a torch and a guide book in Malagasy and English – and is taught how to identify the stone and its quality."

Lawson is now researching the sapphire supply chain to find opportunities for women to participate and add value. She says that while there are certainly many challenges to overcome, she is hopeful for the women's future.

"The commercial world has a growing awareness and concern about where stones come from, the conditions miners and cutters work



SPOTLIGHT ON MADAGASCAR

218

sub-Saharan African students
enrolled at UQ

758

alumni in sub-Saharan Africa

59

academic staff born in
sub-Saharan Africa

in, and the possible associations with environmental damage, conflict and health risks," Lawson said.

"And I've discovered a lot of goodwill from women in other parts of the supply chain and a feeling of responsibility towards improving the situation of the women miners."

Lawson's latest work is undertaken through the Gemstones and Sustainable Development Knowledge Hub, a collaboration between UQ, University of Delaware and Lausanne University, and is funded by The Tiffany & Co. Foundation.

web To read more about Lawson's work in Madagascar, visit contact-magazine.uq.edu.au or download the *Contact* app.



⋮ A Malagasy woman sieves for sapphires (main image); a sapphire miner uses a loupe and tweezers to identify a stone (left); UQ PhD student Lynda Lawson trains women in a field gemmology class in Madagascar (centre); and a family sieve for gemstones in the river (right). Images supplied by Lynda Lawson

Attracting the BIGGEST to support the smallest

UQ's Entrepreneur in Residence Ran Heimann explains why luring global tech companies is crucial to a successful innovation ecosystem.

Entrepreneurial innovation is one of the most important factors driving global business, employment and economic growth. And, while we don't know exactly what lies ahead, one thing is certain: companies, cities and economies that don't embrace and adapt to the new economy will be left behind.

Anyone familiar with global technology growth markets knows about Israel's Startup Nation phenomenon. Despite its turbulent political landscape, Israel has established itself as an entrepreneurial market that punches well above its weight. But what makes this country of only 8 million people so effective at producing great technology and developing entrepreneurs who embrace rapid global growth?

As someone who was born in Israel, and who has spent the past 20 years doing business in both Israel

and Australia, I would like to offer my unique perspective.

I became the Entrepreneur in Residence at UQ in December 2018, after industry connections recommended me for one of UQ's flagship Ventures programs. As a mentor to early stage startup teams participating in the University's ilab Accelerator, I found myself reflecting on my experience in Israel's entrepreneurial ecosystem and asking the question: how can we bring some of that knowledge and experience to Australia?

I co-founded a tech startup called Haystack in 2014, which was about the time Australian governments started promoting the Australian startup ecosystem. What you hear now about the importance of innovation, and the innovation economy, is what the Israeli government has been promoting since the mid-1990s.

The key difference between Israel and Australia is land. Israel doesn't have a lot of it, and half of the land it does have is desert. It is also one of the only countries in the Middle East with no oil reserves – which means that agriculture, oil, gas and resources are not a good source of wealth. This meant the Israeli government had to act early – or at least much earlier than other western countries.

Building a successful ecosystem is like putting together a jigsaw puzzle. Each piece – government, universities, research and development (R&D) expenditure, global tech companies, funding and talent – is important to

making the bigger picture robust, complete and effective.

I've seen the benefits of building a successful innovation economy, and I'm excited to do my part in helping Australia's ecosystem develop. The positive for Australia is that in the mid-1990s everyone was shooting in the dark. But now, being able to analyse the successful ecosystems around the world, Australia can make progress quickly and catch up to the best.

Fortunately for Australia, we're quite strong already on some of the key puzzle pieces. Foremost, we have universities – like UQ – that are among the best in the world, and we are blessed with top human talent.

Australia should therefore focus its efforts on the missing pieces, and I believe we are doing this. The availability of investment money to the sector has increased significantly over the past five years. All levels of government have introduced various initiatives to support the innovation economy, while the number of founders and startups in Australia has increased year on year.

The one piece that seems to have been largely missed is the importance of attracting global tech companies to open substantial R&D centres in Australia. A key differentiating factor for Israel is the private sector's unusually high spending on R&D, which more than doubles Australia's spending rate. Israel hosts a large concentration of global tech companies who have opened

UQ Ventures' Entrepreneur in Residence Ran Heimann.

significant R&D centres there. This happened due to Israeli government policies luring multinational corporations with promises of high-quality and affordable talent, combined with generous tax incentives.

People tend to blame Australian governments for the low level of R&D investment. However, looking at data from the Organisation for Economic Cooperation and Development (OECD), Australian governments are spending a higher proportion of gross domestic product (GDP) on R&D than both the Israeli and the Swedish governments. Australian education institutions are spending similar proportions of GDP on R&D to Israeli education institutes.

The big difference is in the private money invested in R&D by global technology companies. Intel, Microsoft, Google, Apple, Samsung, SAP and dozens more employ tens of thousands of scientists and engineers in Israel. They outspend both the government and universities when it comes to R&D.


When great talent works on world-leading artificial intelligence at Google, new memory technology at Apple, or the future generation of computer chips, machine vision or driverless cars at Intel, they gain valuable knowledge at the very edge of human knowledge. And after working on these projects for five to 10 years, it is these people who leave the large companies to start their own tech startups.

There is a big difference between building the next app and building the next device or technology to power future apps. To build a resilient innovation economy that stands for generations, we need to build the pathway for truly world-changing companies in the coming years.

Australia has a lot to offer global tech companies and we should use it to lure these companies to think seriously about kickstarting their Australian R&D presence. We already have some of the best talent at comparatively affordable cost. This, combined with some of the most livable cities, an English-speaking

multicultural environment and beautiful weather goes a long way in appealing to these companies and their employees. By adding specific government policies around special visas and programs targeting global tech companies – together with tax incentives – I believe Australia would be able to accelerate this process and create a solid foundation for a sustainable innovation ecosystem that would propel business, employment and economic growth for the next generation.

My goal as UQ's Entrepreneur in Residence is to help shape the next generation of UQ startup entrepreneurs to think big, act ethically, embrace healthy habits, network and help one another. Together, these are the building blocks Australia needs to create purposeful new ventures to make our world a better place.

 To learn more about entrepreneurship at UQ, visit ventures.uq.edu.au.

ABOUT THE AUTHOR

Ran Heimann is a 'serial entrepreneur', having founded various successful companies in Israel and Australia. Heimann co-founded the Haystack digital business card company in 2014, which boasts global clients including L'Oréal, Toyota, Pizza Hut, Keller Williams, EY and Vodafone. He is now using his 20 years of business experience to guide future innovators as UQ Ventures' Entrepreneur in Residence.



Image: Marc Grmwade

“The world wants quality journalism... we have seen a return to the most trusted pillars of news.”

A matter of TRUST

Dow Jones Head of Media Sales Asia-Pacific Julia Clyne tells *Contact* how her love of ideas, language and literature helped plot an unusual career path.

By *Melanie Williams*

The beauty and power of ideas has long captivated Julia Clyne, and now her journey of discovery has led her to a position where she is helping to reinstate the trust in major news organisations.

While pivoting effortlessly between thanking a waiter in Cantonese before demonstrating an app to help navigate the Hong Kong taxi system, Clyne (Bachelor of Arts '06) explains how she came to work in media sales and advertising for giants like *The New York Times* and Dow Jones.

“I really enjoyed my studies at school, but I wasn’t sure what I wanted to do,” Clyne said.

“Originally, I decided I should study law, as that seemed to be what most academically inclined students did.

“But someone in my family told me that if I wasn’t sure what to do, I should study to develop my understanding of the world and study what I loved.”

Clyne took this advice to heart, choosing to pursue a Bachelor of Arts and majoring in French and religion

studies. She said her education gave her the skills to approach and address complex issues in any industry.

“The most powerful thing that I learnt at university was the ability to think critically.

“I carried this ability to analyse and dissect a situation from different angles with me from the classroom to different professional scenarios with relative ease.”

After working in different industries around the world, Clyne joined *The New York Times* in 2015 as the Executive Director, Advertising, Asia-Pacific in Hong Kong, where she helped drive sales for new advertising products for the media giant.

While news media has hit an unprecedented challenge with a shift to online consumption, *The New York Times* focused on its digital subscription model, which saw subscriptions grow to about 2.8 million in 2018.

“The world of journalism went through significant flux with the advent of digital technology,” Clyne said.

“But the world still wants quality journalism. As a result of our current political climate, we have seen a return to the most trusted pillars of news. Readers are becoming more informed and more selective about what sources they will engage with.

“It is important that we adjust our models of revenue as reader consumption patterns change with the introduction of new technology.

“This is something *The New York Times* has done quite well.

“While it has taken on new approaches to paid advertising, we worked first and foremost

to maintain the credibility and trust in the organisation. The editorial team is kept completely separate from our paid content teams, because maintaining autonomy and credibility is critical.”

Clyne has recently moved to Dow Jones to head their Media Sales for the Asia-Pacific region.

Before joining the world of international news advertising and sales, Clyne’s career spanned a number of fields and countries.

She spent several years working in London’s finance industry, before returning to her roots and passion for literature in Australia.

This shift saw her take on a role with publisher Penguin Random House in Melbourne, before working for Fairfax Media, where she forged a name for herself in news advertising.

Now based permanently in Hong Kong, Clyne said her exposure to wider world views and history through her studies at UQ helped her navigate the social and cultural complexities of the countries in which she has worked.

“The study of people, religion and language helped me understand more about who people are and what motivates, inspires and moves them,” Clyne said.

“We cannot approach the world from one perspective – the more you learn, the greater your ability to empathise and generate solutions that bridge many divides.”

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STUDENTS EXHIBIT CURATING FLAIR

UQ Art History students are creating their own history, curating exhibitions for the *Summer Mixer* program at the UQ Art Museum.

By Suzanne Parker

Summer is traditionally a time of rest for university students – but not for three Bachelor of Arts undergraduates who spent their holiday season honing their curating skills at UQ Art Museum.

Bree Di Mattina, Brittany-lea Traverso and Taylor Hall completed the Visual Arts Curating and Writing course in 2018, where Art Museum Associate Director Dr Holly Arden introduced them to curating contemporary art projects.

But little did they know that their newly acquired knowledge of devising exhibition rationales, creating floorplans and writing exhibition texts would become a professional reality quite so soon.

“Based on their exhibition proposal assignments, which included selections from more than 4000 artworks in our collection, we chose three students to share their concepts through a *Summer Mixer* suite,” Dr Arden said.

Along with members of the UQ Art Museum’s professional staff, including Senior Curator Peta Rake, Dr Arden worked with the students over several months to prepare their exhibitions.

“We have been delighted with the results, and believe the students have developed not only increased confidence but also greater curatorial intuition and a belief in their ability to see and experience art from a totally different perspective,” Rake said.



Bachelor of Arts student Taylor Hall with her *Summer Mixer* exhibit *Hold, Everything*.

Di Mattina’s exhibit *Figure Eight* focused on eight Australian artworks that explore ingrained sexual and gender stereotypes found in society.

“Each artist – Vivienne Binns, Angela Brennan, Eric Bridgeman, Barbara Hanrahan, Tracey Moffatt, Wendy Sharpe and TextaQueen – has taken inspiration from a story, an artwork, a poem or narrative, and reworked them in their artworks to try and represent a more balanced approach,” Di Mattina said.

Traverso’s *Punchline* exhibition took a different tack, and examined artworks – by Tony Coleing, Peter Milne, Ann Newmarch, David Ray, Toni Robertson and Joan Ross – that employ satire to puncture Australia’s perceived egalitarian society.

“My motivation for developing this theme stemmed from the desire to work with humour and art,” Traverso said.

“Humour has such a pivotal role in Australian culture, yet is stigmatised in the art world. I wanted to demonstrate how satire could be used as a collective language to dismantle preconceived ideals of Australian politics and society.”

Whereas Hall’s *Hold, Everything* sculptural exhibition – with pieces by Paul Adair, Benjamin Armstrong, Mikala Dwyer, Rosie Miller, Caroline Rothwell, Koji Ryui, Alex Seton and Judith Wright

– was “a chance to consider our innate relationship to materials”.

“My objective was to push for a more tactile way of seeing, allowing the artworks to demonstrate the complexity of their material substance and the way they are read,” Hall said.

“I wanted the relationship between viewer and artwork to allow for deeper contemplation – a pause, if you will.”

Holding that thought, the successful launch of the *Summer Mixer* suggests it may become a seasonal staple for UQ Art History students.

What’s on

John Baldessari, Wall Painting (UQ Art Museum, July 26–August 31)

Renowned American conceptual artist John Baldessari’s Wall Painting will be staged at UQ Art Museum in collaboration with UQ students. Each day, for 31 days, two UQ students are invited to paint one wall of the UQ Art Museum a single colour of their choosing. Participants negotiate with one another to learn about time and decision-making.

For more details, visit art-museum.uq.edu.au/collection.

YOUNG LION ROARS WITH PRIDE

It’s every footballer’s dream to represent the club they supported as a child. *Contact* caught up with UQ student Natalie Grider about what it meant to make her AFLW debut for her beloved Brisbane Lions.

By Michael Jones

UQ student and AFL Women’s (AFLW) rookie Natalie Grider was just a toddler when the Brisbane Lions won three consecutive AFL premierships between 2001 and 2003.

While the Lions have had little to celebrate since, Grider remained a loyal supporter of the club and dreamt of one day wearing the Brisbane jersey.

Her dream came true in February this year when the 18-year-old debuted for the Lions during the club’s round-four AFLW victory over the Western Bulldogs at Whitten Oval in Melbourne.

Grider wasn’t expecting to play that day, but was thrust onto the big stage after Lions captain Leah Kaslar withdrew from the match through injury one hour before the bounce.

The young defender said while it wasn’t the ideal preparation, she would always treasure that moment.

“I had a pretty different debut experience to most of the other girls because I didn’t know I was playing until just before the match started,”

said Grider, who was drafted with the Lions in October last year.

“I remember one of our coaches saying to me: ‘When you walk out on the field, don’t put your head down. You’re only going to experience your first game once. Just look around and take everything in’.”

Grider played two AFLW matches in 2019, and was named in the starting side in the Lions’ final match against Collingwood at Victoria Park in Melbourne.

While the Brisbane local always hoped she would one day play professional football, she did not foresee the AFLW becoming so popular across the country.

“I’m so excited about where the competition is heading,” she said.

“The scenes from the Adelaide Oval, where more than 53,000 watched the Adelaide Crows defeat Carlton in this year’s AFLW grand final, were amazing and I can’t wait to play in front of a crowd that big.”

With the AFLW season ending in March, Grider has returned to club football with UQ, where the 2019 UQ Sports Achievement Scholarship recipient is in her second year of a Bachelor of Exercise and Sports Sciences degree.

“Playing in the AFLW means I’m in different cities most weekends during the season, and my training commitments are quite intense,” Grider said.

“The Sports Achievement Scholarship gives me more flexibility with course work and attendance, and the financial benefits go a long way to helping me achieve my best.”


The UQ Australian Football Club has a strong connection with the Lions, with Grider one of six UQ players recruited to Brisbane in 2019.

Grider said she was looking forward to seeing the UQ club improve both on and off the field with the opening of a Queensland Government-funded development at UQ’s St Lucia campus, including new change rooms and physiotherapy areas, more spectator seating, bar and canteen facilities, and function space.

“We’ve struggled with ground availability in the past, which made it difficult to host our home games. I think that this will really bring the club together.”

Image: Anjanette Webb

To read the extended story about Natalie, visit contact-magazine.uq.edu.au or download the *Contact* app.



You can help students like An Tran (pictured) overcome financial hardship and achieve their dreams by donating to Aspire Scholarships.

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